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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590 04/06/2004			EXAMINER	
CRAWFORD PLLC			MCLOUGHLIN, MICHAEL I	
Suite 390 1270 Northland	l Drive		ART UNIT	PAPER NUMBER
St. Paul, MN 55120		•	2662	5
			DATE MAILED: 04/06/2004	4

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	09/739,410	BARRACLOUGH ET AL.					
Office Action Summary	Examiner	Art Unit					
	Michael I McLoughlin	2662					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on							
2a) ☐ This action is FINAL . 2b) ☑ This	action is non-final.						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4) Claim(s) 1-20 is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
)☐ Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-20</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	Claim(s) are subject to restriction and/or election requirement.						
Application Papers							
9)⊠ The specification is objected to by the Examiner	r.						
10)⊠ The drawing(s) filed on <u>07 May 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau 	s have been received. s have been received in Application ity documents have been receive	on No					
* See the attached detailed Office action for a list of	1 //	d.					
Attachment(s)	, -						
1) X Notice of References Cited (PTO-892) 2) X Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary (Paper No(s)/Mail Da						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)					

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DETAILED ACTION

Specification

- 1. The disclosure is objected to because of the following informalities:
 - a) On page 10 at the end of line 3 is "can be used an".
 - b) On page 10 in line 5 the word "suite" appears to have a typographical error.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, "adapted to use communications standards for VoIP" renders this claim indefinite because this does not define which specific standards apply.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claims 1, 2, 5-11, 13, and 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Kelly (U.S. 6,377,568), hereinafter referred to as Kelly. Also, Kelly's prior art is further disclosed in Mattaway et al. (U.S. 6,131,121) that is incorporated by reference, see column 1, lines 23-31, hereinafter referred to as Mattaway.

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6. Regarding claim 1, Kelly discloses an IP-telephony interface circuit arrangement (see figure 2), comprising:

a plurality of audio-endpoint devices adapted to process audio information coupled to respective audio channels (gateways 218 adapted to process audio information from the coupled telephones 214); and

a data gateway circuit including multiple circuit paths coupled to the respective audio channels, the multiple circuit paths adapted to process the audio information (the multiple paths between elements of figure 2), and

including an interface circuit adapted to convert the audio information between a first audio-channel format and a second IP-data format (circuits in gateway 428 adapted to convert a digital or analog audio stream, see column 9 line 35, from telephone 432 to TCP/IP audio, see column 9, lines 33-34); the data gateway circuit being configured and arranged with a first interface for communicatively coupling the audio information in the second IP-data format to an IP communications link (a first network interface operatively coupling to a packet-switched data network, see column 4 lines 24-25) and with a second interface for communicatively coupling the audio information in the first audio-channel format to the plurality of audio-endpoint devices (a second network interface operatively coupling to a circuit-switched network, see column 4 lines 27-29).

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7. Regarding claim 2, Kelly further discloses that the gateways are scalable depending on the network in column 9 on lines 56-57 and can be configured and arranged to expand service to additional audio-endpoint devices.

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8. Regarding claim 5, Kelly discloses a data gateway adapted to convert between IP and analog telephony data (gateway 428 of figure 4 disclosed in column 9 line 31 through column 11 line 28), the gateway comprising:

an IP telephony processor adapted to compress and format audio data for transmission over an IP network (as disclosed in Mattaway, a first processing unit 12 of figures 1 and 2 for sending a voice signal see column 4 line 21, to the Internet or other computer networks, see column 4, line 28, that includes codecs shown in figure 13A for compression and decompression of the audio data stream, see column 16 lines 13-14); an IP communications port adapted to connect to an IP communications link (four communication ports associated with the VWPs in figure 4 each of which is coupled to a TCTP/IP network over connection 408, see column 10 lines 22-23); a POTS communications port adapted to connect to a POTS link (communications ports associated with the VWA of figure 4 adapted to connect to POTS links for the 800 services as shown in figure 4).

9. Regarding claim 6, Mattaway further discloses that gateway 428 uses the computer system 1100 in figure 11 that runs Webphone Version 1.0 software disclosed in column 14 line 52 as Codec integration software for codecs 1320 in figure 13 A, and it is inherent this computer system includes a PCB.

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10. Regarding claim 7, it is inherent that computer system 1100 includes a unit level assembly for housing the PCB.

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- 11. Regarding claim 8, Mattaway further discloses that the Webphone Version 1.0 software used as Codec integration software operates in object modules in column 15 lines 10-11.
- 12. Regarding claim 9, Kelly further discloses that software for the gateway 428 may be generated using the a Webphone Application Program Interface Developers Kit in column 11 on lines 9-11 that implies the Developers Kit includes software tools. Also, in column 11 on lines 12-16 it is disclosed further that the proprietary software includes the appropriate algorithms which, given identification signals defining the gateway and ports will resolve the signals associated with an Email communications system that implies evaluation of the Email communications system to resolve the signals.
- 13. Regarding claim 10, Kelly further discloses a Webphone Application Program Interface Developers Kit in column 11 on lines 10-11 that is software that runs on the hardware residing in a computer system 100 shown in figure 1, and when used in the IP telephony network shown in figure 4 has communication links 426 and 408 adapted to couple to conventional telephony device 432. Software for the gateway 428 may be generated using the a Webphone Application Program Interface Developers Kit is disclosed in column 11 on lines 9-11 that implies a programming interlink between a computer system 100 running this developer's kit and the gateway 428.
- 14. Regarding claim 11, Mattaway further discloses a Webphone API process in figure 13B that can be adapted to use communications standards for VoIP via the IP, TCP, UDP, and/or RTP protocols shown in figure 13B and disclosed in column 17 lines 2-5.

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15. Regarding claim 13, Mattaway further discloses that the first processor unit 12 of figure 1 is adapted to use DSP and command/control processing for compressing and formatting the audio data (the processors and processor units disclosed in column 6 lines 1-23 may include DSP hardware in column 6 on lines 14-15.

- 16. Regarding claim 16, Mattaway further discloses that computer system 1100 includes RAM memory 1226 in figure 12 and in column 13 on lines 15-16.
- 17. Regarding claim 17, Mattaway further discloses that the first processor unit 12 of figure 1 is remotely programmable via the TCP Using the Webphone API for remote command control in column 17 on lines5-6.
- 18. Regarding claim 18, Kelly further discloses gateway 428 being adapted to control a plurality of four telephony calls simultaneously via VWA 1 through VWA 4 in figure 4 using a ring management process for the respective telephones 432.
- 19. Regarding claim 19, Kelly further discloses that the IP communications link on gateway 428 may include a broadband link using ATM in column 10 on line 5.
- 20. Regarding claim 20, Kelly discloses an IP telephony communications system (figure 2) comprising:

a data gateway adapted to convert between IP telephony data and POTS telephony data (gateways 218 adapted to convert between IP telephony from internet 220 and POTS telephony data to telephones 214);

an IP communications link coupled to the data gateway and to an IP communications network (link coupled to gateway 218A and to the internet 220 in figure 2); and

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a POTS link coupled to the data gateway and to a POTS communications network (link between 218A and telephone terminating apparatus 214 in figure 2 where 214 can be in a POTS network as disclosed in column 6 on line 33).

Claim Rejections - 35 USC § 103

- 21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 22. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly.
- 23. Regarding claim 3, Kelly further discloses that the gateways are scalable depending on the network in column 9 on lines 56-57 and can be configured and arranged to expand service to additional audio-endpoint devices, but does not expressly disclose that the gateway is configured and arranged to expand service to additional audio-endpoint devices in multiples of 2^N, where N is an integer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kelly's circuit arrangement to allow expanding service to additional audio-endpoint devices in multiples of 2^N order to accommodate voice circuits between two specific audio-endpoint devices such as hot lines.
- 24. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly in view of Langlais (U. S. 6,091,932), hereinafter referred to as Langlais.
- 25. Regarding claim 4, Kelly teaches a circuit that includes four communication ports, see column 10, line 22, associated with the virtual interfaces VWA in figure 4 that interface to 800 network services that can be analog lines, see column 9 line 35, but does not expressly disclose

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that the communication ports includes SLICs. Langlais teaches a subscriber telco module that includes dual SLICs in figure 3 and in column 8 on line 60. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kelly's circuit by using a pair of dual SLICs for Kelly's communications ports as taught Langlais, in order to reduce the physical size and most likely the cost of the circuit.

- 26. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly in view of Beddus et al. (U. S. 6,654,457), hereinafter referred to as Beddus.
- 27. Regarding claim 12, Kelly discloses the data gateway of claim 5 (gateway 428 of figure 4 disclosed in column 9 line 31 through column 11 line 28), and further discloses that gateway 428 includes a Virtual met-me VMMA agent, but does not expressly disclose adapting gateway 428 to interface with Microsoft NetMeeting software

Beddus teaches a gateway that is adapted to interface with Microsoft NetMeeting software in figure 2 with the Agent running Microsoft's NetMeeting software in column 3 in line 19. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Kelly's gateway 428 by having Kelly's agent run Microsoft's NetMeeting software instead of VMMA. One would have been motivated to make this modification in order to expand Kelly's meet-me functionality to remove the limitation of allowing only VMMA users and allow NetMeeting users on the system that results in increasing the capabilities of the system that leads to supporting a larger customer base and increasing profits.

28. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly in view of Hooks et al. (U. S. 6,294,892), hereinafter referred to as Hooks.

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29. Regarding claim 14, Kelley teaches that the second interface provides a conventional packet-switched data interface such as 10 BaseT Ethernet in column 10 in lines 3-4, but does not expressly disclose that the second interface includes an Ethernet MAC/PHY chip. Hooks teaches a network interface card 114 in figure 2 that uses an AMD 79C961 MAC/PHY chip in column 3 on line 30 that is adapted to provide access to 10Base T Ethernet and manage flow control. It would have been obvious to one of ordinary skill in the art to Modify Kelly's second interface to include the AMD 79C961 in order to reduce parts count and reduce cost, and address applications where higher system throughput is desired.

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- 30. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly in view of Locascio (U.S. 6,603,757), hereinafter referred to as Locascio.
- 31. Regarding claim 15, Kelly discloses the data gateway of claim 5 (gateway 428 of figure 4 disclosed in column 9 line 31 through column 11 line 28), and Mattaway further discloses that the gateway includes memory and a remotely command control of the gateway in column 17 on lines 5-6, but they do not expressly disclose using flash memory.

Locascio teaches a VDAC card for providing VoIP in the abstract on line 4 that includes FLASH data memory taught in column 4 on line 14. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Kelly's gateway with the teaching of Locascio and add flash memory in order to not only have the remote command control of the gateway, but also insure that programming is maintained during times of power failure via the nonvolatile property of FLASH.

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Conclusion

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 1) Publication # 18183, AMD Am79C961A datasheet
- 2) Pickett (U.S. 6,181,694), Systems and methods for multiple mode voice and data communications using intelligently bridged TDM and packet buses.
- 3) Thornton et al. (U.S. 6,363,065), OKapparatus for a voice over IP (VoIP) telephony gateway and methods for use therein.
- 4) Gerzberg et al. (U.S. 6,044,403), Network server platform for Internet, JAVA server and video application server.
- 5) Mandalia (U.S. 6,507,647), Bulk calling using voice over IP telephony.
- 6) Takahashi (U.S. 6,643,364), Providing telephony services.
- 7) Ng et al. (U.S. 6,243,376), Method and apparatus for making a phone call connection over the Internet connection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael I McLoughlin whose telephone number is 703-308-7911. The examiner can normally be reached on weekdays 7AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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MIM

March 29, 2004

HASSAN KIZOU

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600